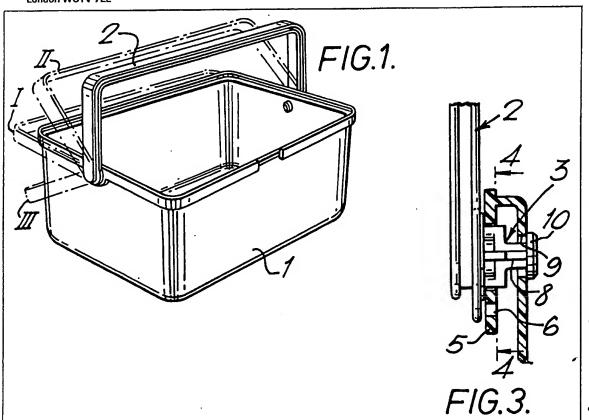
(12) UK Patent Application (19) GB (11) 2 095 214. A

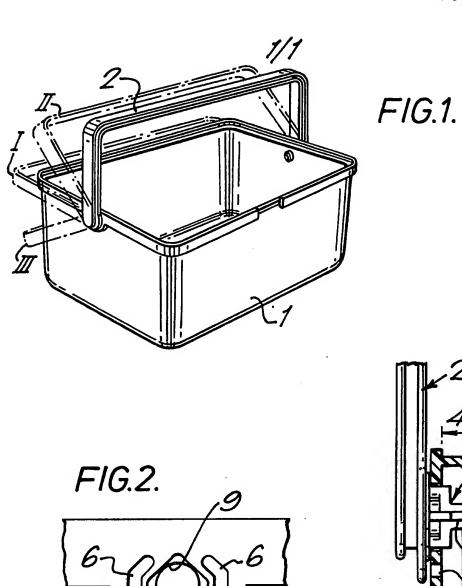
- (21) Application No 8108771
- (22) Date of filing 20 Mar 1981
- (43) Application published 29 Sep 1982
- (51) INT CL³ B65D 25/32
- (52) Domestic classification B8P H2 E2F 110 112 606 673 AG
- (56) Documents cited GB 1494343 GB 1192095 GB 0816015
- (58) Field of search 88P 88D E2F
- (71) Applicants
 Mothercare Limited,
 Cherry Tree Road,
 Watford, Herts WD2 5SH
- (72) Inventor Noel Fleury
- (74) Agents
 A. A. Thornton and Co.,
 Northumberland House,
 303/306 High Holborn,
 London WC1V 7LE

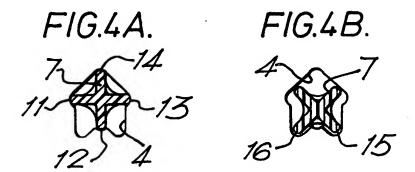
- (54) A portable body with carrying handle
- (57) A portable container body 1 has a substantially U-shaped carrying handle 2 each end of which has an inwardly extending lug 3 disposed in a respective opening in a flange portion 5 of the body 1. The lug 3 and the
- opening have co-operating profiles, at least one of which is resiliently deformable, and including projections on the lug and recesses in the opening which together define an upright carrying position of the handle 2 relative to the body 1 and other positions I, II and III at right angles 45° and 135° respectively to the carrying position.



095 214 /

FIG.3.





SPECIFICATION A portable body with carrying handle

The present invention relates to portable bodies having substantially U-shaped carrying handles, 5 each end of such handles being mounted to the body by means of a lug disposed in a corresponding opening.

Portable bodies, for example buckets, with at least one such freely pivotable handle are well 10 known. The lugs may be provided either as inwardly extending lugs at each end of the handle or as outwardly extending lugs on the body with the openings provided on the body or ends of the handle respectively. Either arrangement suffers 15 from the disadvantage that relative pivoting between the body and handle is allowed during transport.

According to the present invention each opening and its corresponding lug are provided 20 with cooperating profiles, at least one of which profiles is resiliently deformable, one of the profiles including at least one projection and the other including at least one recess which together define at least a carrying position of the handle 25 relative to the body. Thus a carrying position is provided in which relative pivoting motion between the handle and body is prevented. Where the body is a container this is particularly important in reducing the risk of damage to the 30 contents, for example due to their knocking against the sides of the container. The fixed carrying position also increases the case with which a heavy and/or unwieldy body may be carried.

35 Preferably the lugs are provided as inwardly extending lugs on each end of the handle and the opening are in a resilient portion of the body. This produces a neat exterior finish which is desirable, for example, where the body is a box-like 40 container for a baby's toilet requisites.

In order that the invention may be well understood an embodiment thereof will now be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 is a perspective view of a portable container with handle showing in phantom some of the positions which the handle can take up relative to the container body;

45

Figure 2 is a detail of an opening in the body for 50 receiving the handle;

Figure 3 is a section through a portion of a side wall of the container showing one end of the handle mounted to the container body;

Figure 4A is a section on the line 4-4 of Figure 55 3; and

Figure 4B is a view similar to Figure 4A showing the relative positions of the parts when the handle is in a different position from Figure 4A.

Figure 1 shows a portable container body 1 having a substantially U-shaped carrying handle 2. 125 The handle 2 is shown as having three substantially straight sections, however a semicircular or similar arcuate shape may be provided. Each end of the handle 2 has an

65 inwardly extending lug 3 disposed in a hole 4 in a resilient flange portion 5 of the body 1. The resilience of the flange 5 in the region of the opening may be increased by the provision of further openings 6 surrounding the opening 4.

The lug 3 comprises a portion 7 disposed in 70 opening 4. The portion 7 is provided with four perpendicular projections or limbs defining a cruciform profile. The lug 3 further comprises a projecting shank 8 which passes through a further opening 9 in the wall of the container behind flange 5. The shank 8 terminates in a tapered stud 10. The larger diameter of the outer face of the stud is slightly greater than the diameter of hole 9 so that once the stud has been pushed through 80 the hole 9 from the outside it is not possible for it to be withdrawn without excessive force.

The profile of opening 4 and the cruciform profile of lug portion 7 cooperate to define a plurality of fixed positions of the handle 2 relative 85 to the body 1. The handle being movable from one position to another on application of a definite pivoting force. This is achieved by the provision of a plurality of recesses in the profile of opening 4. When the handle is in the upright carrying position 90 shown in Figure 1 or positions I as shown in phantom in Figure 1 the ends of the limbs of the cruciform portion are disposed in recesses 11, 12. 13. The remaining limb having its end located at the right angle 14. There are four handle positions 95 in which the cruciform portion has the appearance shown in Figure 4A and these four positions are mutually at right angles. It may not be possible or useful for the handle to take up all four positions in dependence on the shape and purpose 100 of the body. If the handle is rotated through 45° from any of the four above-mentioned positions the ends of two of the limbs are located in recesses 15 and 16 of opening 4. Two of the four possible positions in which the cruciform portion 7 105 has the appearance shown in Figure 4B are illustrated in phantom as positions II and III in Figure 1. Whilst the upright position of the handle is useful as a carrying position some or all of the other attainable positions may be useful as handle

110 storage positions. In order to move the handle 2 from one of the above-described positions to another a firm pivoting force is applied to the handle. Since the flange portion 5 is resilient application of sufficient 115 force will allow the ends of the limbs of the cruciform portion to move out of their recesses and rotate until some or all of them lock into the recesses of the next fixed position. If this is not the desired position further applications of pivoting force, in either sense, to the handle will move the handle between its various fixed positions. In normal use the handle will remain in the last set position until forced out of it so that during carrying with the handle in the upright position the container body 1 and handle 2 will remain fixed relative to one another.

> It will be appreciated that although in the illustrated embodiment the handle 2 carries the inwardly extending lugs 3 and the openings 4 are

provided on the container body 1, it is possible alternatively to provide the ends of the handles with openings to cooperate with outwardly extending lugs carried by the body.

5 CLAIMS

- 1. A portable body having a substantially U-shaped carrying handle each end of which is mounted to the body by means of a lug disposed in a corresponding opening; wherein each lug and corresponding opening are provided with cooperating profiles, at least one of which profiles is resiliently deformable, one of the profiles including at least one projection and the other profile including at least one recess which together define at least a carrying position of the handle relative to the body.
 - 2. A portable body as claimed in claim 1, wherein said profiles define positions of the handle at right angles from said carrying position.
- 20 3. A portable body as claimed in claim 1 or 2, wherein said profiles define positions of the handle at an acute angle from said carrying position.
- 4. A portable body as claimed in claim 3, 25 wherein said acute angle is 45°.
 - A portable body as claimed in claim 1, 2 or 3 wherein said profiles define positions of the handle at an obtuse angle from said carrying position.

- 30 6. A portable body as claimed in claim 5, wherein said obtuse angle is 135°.
 - A portable body as claimed in claim 6, wherein said lug comprises four projections defining, a cruciform profile.
- 8. A portable body as claimed in claim 7, wherein said opening comprises four recesses for receiving the projections of the lug for defining said carrying position and said positions at right angles therefrom, and two further recesses and
 surfaces opposed thereto for receiving and cooperating with said projections for defining said positions at 45° and 135° from said carrying
- 9. A portable body as claimed in any one of the 45 preceding claims, wherein the lugs extend inwardly on each end of the handle and the openings are in resilient portions of the body.
- 10. A portable body as claimed in claim 9, wherein the openings are provided in a resilientdownturned flange portion of the body.
- 11. A portable body as claimed in claim 10, wherein further openings are provided in the flange about each said opening to facilitate resilient deformation of the profile defined
 55 thereby.
 - 12. A portable body having a substantially Ushaped carrying handle and substantially as herein described with reference to the accompanying drawings.

Printed for Her Majesty's Stationery Office by the Courier Press, Learnington Spa, 1982. Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained